

### AMENDMENT TO THE SPECIFICATION

Please replace paragraph [0126] with the following re-written paragraph:

[0126] In addition, the terminus of at least some of the conductive oligomers in the monolayer are electronically exposed. By "electronically exposed" herein is meant that upon the placement of an ETM in close proximity to the terminus, and after initiation with the appropriate signal, a signal dependent on the presence of the ETM may be detected. The conductive oligomers may or may not have terminal groups. Thus, in a preferred embodiment, there is no additional terminal group, and the conductive oligomer terminates with one of the groups depicted in Structures 1 to 9; for example, a B-D bond such as an acetylene bond. Alternatively, in a preferred embodiment, a terminal group is added, sometimes depicted herein as "Q". A terminal group may be used for several reasons; for example, to contribute to the electronic availability of the conductive oligomer for detection of ETMs, or to alter the surface of the SAM for other reasons, for example to prevent non-specific binding. For example, there may be negatively charged groups on the terminus to form a negatively charged surface such that when the nucleic acid is DNA or RNA the nucleic acid is repelled or prevented from lying down on the surface, to facilitate hybridization. Preferred terminal groups include  $-\text{NH}_2$ ,  $-\text{OH}$ ,  $-\text{COOH}$ , and alkyl groups such as  $-\text{CH}_3$ , and (poly)alkyloxides such as (poly)ethylene glycol, ~~with  $-\text{OCH}_2\text{CH}_2\text{OH}$ ,  $-(\text{OCH}_2\text{CH}_2\text{O})_2\text{H}$ ,  $-(\text{OCH}_2\text{CH}_2\text{O})_3\text{H}$ , and  $-(\text{OCH}_2\text{CH}_2\text{O})_4\text{H}$~~  with  $-\text{OCH}_2\text{CH}_2\text{OH}$ ,  $-(\text{OCH}_2\text{CH}_2)_2\text{OH}$ ,  $-(\text{OCH}_2\text{CH}_2)_3\text{OH}$ , and  $-(\text{OCH}_2\text{CH}_2)_4\text{OH}$  being preferred.